

## GOOD HIGHWAYS ASSIST FARMER

Vast Road-Building Program Now Under Way Throughout Whole United States.

### POOR ROADS ADD BIG TOLL

Projects Have Been Approved Calling for Federal Aid to Amount of \$110,840,773—Important Factor in Buying and Selling.

(Prepared by the United States Department of Agriculture.)

The highway is coming into its own in America. Neglected, abused, undervalued, subjected to cheap remedies for decades, at last the country road is being accorded the treatment it deserves. At a cost of hundreds of millions, the United States is rapidly overcoming the economic handicap which highway neglect has so long entailed.

This stupendous movement, the scope of which the public even now does not fully comprehend, is founded on sound business considerations. Good roads pay. If they did not, the nation would not now be constructing and planning them on an unprecedented scale. They pay by promoting the social life of the people by helping relieve the congestion that is making metropolitan areas unmanageable. But, more important still, they pay in dollars and cents, for poor roads add a heavy toll to the buying and selling of

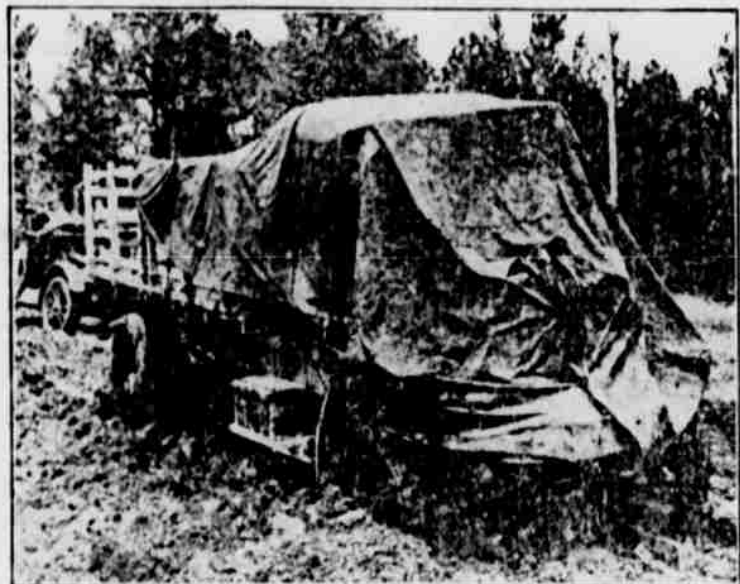
point on a moderately muddy earth road—and earth roads are moderately muddy many months in the year.

Several years ago information secured by the department of agriculture from 2,800 correspondents indicated that the average cost of hauling on an unimproved country road was 22.7 cents a ton-mile. Today, with price levels much higher, the cost would be even greater.

While it is difficult to estimate accurately what the saving would be if all highways were improved in the districts represented by these replies, a specific instance makes the benefit plain. A farmer in a southern state had to haul a ton of barbed wire 23 miles over unimproved roads. He found that with a two-horse team his maximum load was 500 pounds, and that three days were required to make one round trip. To haul one ton, therefore, required 12 days to make one round trip. Allowing \$6 a day for man and team, the cost was \$72. After the roads in this region were improved, the same team could draw a ton to the load and make one round trip in two days, at a cost of \$12. The ton-mile cost under old conditions was \$3.18, and this cost was reduced to 52 cents by the improved road.

#### Roads and Wheat Marketing.

Take the saving in the cost of hauling wheat as another example. If the construction of narrow, single-track roads with improved surface will reduce the hauling cost 5 per cent a ton-mile, and if the average yield of wheat in the vicinity of these roads is 30 bushels to the acre, there results, for an average haul of five miles, an economic advantage of 22.5 cents an acre or \$30 a quarter section. This is 4 per cent on \$800. Calculations of this sort have shown thousands of communities the wisdom of borrowing money



Paying the Price of False Highway Economy.

farm products—a toll far in excess of the expense of adequate improvement.

#### Unprecedented Road Program.

This is a lesson cities as well as rural districts are learning. In the bureau of public roads, United States department of agriculture, which administers the federal aid road act, is centered supervision of all highway construction which federal funds help carry on. At the close of last year, project statements had been approved calling for federal aid to the amount of \$110,840,773—a sum which indicates how fully the nation is convinced that better roads mean better business. The total federal funds available to aid the states in their road-building programs up to July 1, 1929, will be \$109,750,000—and this total is exceeded by the combined expenditures of state, county, and municipalities.

#### Better Roads, Better Business.

The business considerations back of these vast investments are not far to seek. Better roads mean cheaper and quicker hauling. It has been estimated, for example, that on a level, muddy earth road the amount which one horse can draw in an ordinary wagon varies



Where Ton-Mile Costs Are Low.

from nothing to a maximum of 800 pounds; on a smooth, dry earth road, from 1,000 to 2,000 pounds; on a gravel road in good condition, from 1,000 to 1,500 pounds; on a gravel road in good condition, about 2,500 pounds; on a macadam road, from 2,000 to 5,000 pounds; on a brick road, from 5,000 to 8,000 pounds.

If the speed of travel is the same on all of these surfaces, the horse will haul on a good macadam road from three to five times as many miles a day as upon a moderately muddy earth road. Assuming that one horse is capable of a certain fixed amount a day, then, with a given load, its effective radius of travel from that point on a macadam road is from three to five times the radius of travel from that

point. The easiest, cheapest and most satisfactory way to prevent soil drifting is to sow a field every year to tame grass.

Ergot is a fungus growth on the shady side of corn stalks and sometimes on the underside of maize leaves.

If stable manure is reinforced with 50 pounds acid phosphate to the ton its crop producing value is just about doubled.

Paths and roads about the farmstead not only should be as few as possible but should be kept out of sight so far as feasible, say specialists of the United States department of agriculture.



## ROAD BUILDING

### WAR MATERIAL DISTRIBUTED

Equipment Turned Over Promises to Be Great Aid in Carrying Out Road Building Plan.

To date the war department has turned over to the United States department of agriculture approximately 21,000 motor vehicles, as provided in congressional legislation empowering the latter department to distribute this war material among the state highway commissioners for use in road building, allotments of the vehicles to be based on the amount of federal aid for roads which the states receive. This is practically all the vehicles which the war department has to release. Of this total 12,000 have been delivered to the states. The remainder will be distributed as fast as railroad cars can be secured for their transportation. Representatives of the bureau of public roads, in charge of the matter, believe that within two or three months all of the vehicles will have been delivered to the states. This equipment promises to be a great aid in carrying the large road building program for 1929.

The state highway commissioners are also interested in securing allotments of tractors, steam shovels, locomotive cranes, automotive cranes, industrial railway track, dump cars and industrial locomotives which remain to be disposed of by the war department. A measure known as the Kahn bill, directing the secretary of war to release this material for the state highway commissioners, has passed the senate and has been reported out of committee in the house.



Type of Motortruck Turned Over to States to Aid in Road Building.

Until the secretary of war has been directed by congress to turn out this equipment it is not likely that it will be available for state distribution.

### MAKING ROADS WITH BRAINS

Most of Heavy Work Incident to Highways Is Being Done by Machinery—Cost Is Less.

As help is scarce, and increasing traffic makes good roads a necessity, more and more of the heavy work incident to highways is being done by machinery.

At one time the work of leveling and road building had to be done largely with the pickaxe in the hands of workmen, and with shovels and teams. Now gasoline engines, motor trucks, and huge power-propelled cranes do all of the heavy work. In the new method the expense is less than by the old method, for machinery is always cheaper than human labor, in that a material saving of time is effected.

Good roads are an economy to any section of the country, as they permit produce to be hauled to market just when it will bring the most, and property is always worth more which borders well-constructed highways. Try to buy a farm along a concrete road and you will find the location makes a big difference in the price asked.

### REDUCE COST OF MARKETING

It Can Be Brought About by Farmers Using More Trucks, Trailers and Automobiles.

The high cost of marketing that is such a factor in the cost of living will be reduced when the roads are improved and farmers use more trucks, trailers and automobiles in reaching city markets with their products.

### UNPAVED ROADS UNCERTAIN

When Weather Is Good They May Be Passable If They Have Been Continuously Dragged.

Unpaved roads vary with the weather—paved roads are constant. When the weather is good, dirt roads may be passable if they have been continuously dragged, but they are not roads for truck and automobile traffic, so characteristic of the highways today when properly constructed.

### Good Roads Are Needed.

The need of good roads has been impressed on the entire country in such a manner that first cost has become a secondary consideration.

### Mississippi Valley Roads.

Of the 2,250,000 miles of rural highway in the Mississippi valley only a scant 100,000, or 7.8 per cent of the total, are hard surfaced.

Surfaced Roads in Florida. Florida now possesses more than 1,000 miles of surfaced roads.

## WASHINGTON SIDELIGHTS

Once Painted Signs; Now Famous Artist



WASHINGTON.—From painting signs on express wagons along Canal street in Chicago at 50 cents a wagon to portraits of members of nearly every royal family, and friends in Europe is the distance traveled in the last 20 years by Seymour M. Stone of Chicago, who has returned to this country after 15 years abroad. Barely forty years old, Mr. Stone has achieved an international reputation. His story is a modern fairy tale come true. He is the struggling young artist of fiction come to life.

### Cottontails, Beware of Senator Thomas!

RABBITS, beware of Senator C. S. Thomas of Colorado! In a speech in the senate he said in part: "This brings me to a proposition that I have iterated and reiterated here until I am afraid that I have become a sort of a nuisance to this body. It is that until production in everything that enters into our modern economic life shall have passed the present standard accompanied by the practice of old-fashioned thrift and economy which our parents used to practice, we may stand upon the floor of the senate and denounce the profiteer until judgment morning; we may enact repressive legislation and impose penalties upon the officers of justice who fail to carry it out, but conditions will continue as they are."

"I have a suit of clothes on that I bought four years ago. They are pretty well patched. I have on a pair of shoes that I bought in January, 1916; but I do not propose to buy any more clothes until prices go down, even though I should subject myself to arrest on the street of Washington because of a lack of sufficient amount of clothing. I am no more virtuous or self-denying than my neighbor, but let

### War-Time Passport Is Rejected by House



IN SPITE of an appeal by Republican Leader Mondell, the house rejected the conference report on the diplomatic and consular appropriation bill because of its provisions making permanent war-time passport restrictions. The vote on the approval of the conference report was 196 to 192. The bill was sent back to conference.

Representatives Sabath of Illinois, Siegel of New York and Connally of Texas were among those who fought the adoption of the report. Minority Leader Champ Clark voted against it. The rejected measure made permanent the wartime requirement that no alien could enter the United States without a passport from his own country, issued by an American consul. It also made it necessary for American

### Why We Need More "Rubes" on the Farms

EXPERTS from a contribution on the senate floor by Senators Kenyon of Iowa and Sherman of Illinois: Mr. Kenyon—When a boy getting \$40 a month and his board on the farm can go to the city and get \$7 or \$8 a day, and only work eight hours a day, you cannot keep the boy on the farm.

Mr. Sherman—The cause is basically deeper than equal compensation. If the compensation on the farm were precisely what it is in the cities a large portion of the population is of such a morbid instinct or habit of life that you could not take a dweller in the city out on the farm and make him stay. There are not enough cigar stores, not enough graminola, not enough confectionery establishments, and ballet dancers to suit their habits of life and modes of thought.

Mr. Kenyon—And pool halls. Mr. Sherman—And pool rooms. I am sorry to say, which are worse than any of the others, not even excepting the last I named; and until that is changed and until their natures are bred differently we will not get them to leave the city and go on the farm. I have seen it tried. I unwittingly insulted a friend by suggesting that if he were out of work and money and wanted three meals a day I knew where I could get him a very remunerative place on a farm, and he flushed in the face and said he was no "rube."

Mr. Kenyon—That is the trouble in the country; we have not enough "rubes," as the senator speaks of them.

### Public Hit Hard by Flour Profiteering

ANALYSIS of alleged profiteering in flour, filed with the United States railroad labor board by W. J. Jett Lauck, consulting economist of the railroad brotherhoods, states that the war-time profits absorbed one-third of the price paid by the consumer for a barrel of flour, and that 60 per cent of this margin was chargeable to profiteering.

The actual cost of producing a barrel of flour in 1917, including interest, freight and other expenses of the miller, was only \$8.00, the report says. "For this the consumer was forced to pay at least \$14.50. Had the miller, jobber, wholesaler, and retailer been content with reasonable margins, this flour might have been available to the purchaser at \$11.57. "However, the product was saddled with so many extortionate profits in passing from the mills through the various distributing agencies, that the ultimate cost to the consumer was more than \$1 in excess of a reasonable selling price."

With respect to the milling companies, the survey alleges: "That the profits had advanced in 1917 practically 375 per cent over 1913 earnings; that the cost of operation, which includes labor cost, advanced only 20 per cent in the same period, or only five cents per barrel, as contrasted with an increase in millers' profits of 43 cents a barrel."

Mr. Lauck asserts that the jobbers sliced a profiteering margin of approximately \$18,000,000, or a tax of nearly \$1 on every family in the country."

## ON THE FUNNY SIDE



"I don't know of any man who listens to a hard-luck story with a more sympathetic air than Mr. Wadleigh."

"Then he has a kind heart?"

"No. It's as hard as adamant. He enjoys the discomfiture of the poor wretch who is brusquely refused admission just when he is flattering himself that he never did a better piece of acting in all his career as a philanthropist."—Birmingham Age-Herald.

Had to Obey the Law.

"Why did you let him get away from you?" thundered the chief.

"He—er—took a mean advantage of me," replied the green detective. "He ran across the grass in the park, and—"

"Why didn't you follow?"

"Well, there was a notice there, 'Keep off the grass!'"—Stray Stories.



Freight Auditor—Were you in on it when our directors cut the melon?

Cashier—No. But I cut some figure when they cut the payroll.

Tastes Differ.

Mr. Sankey—You don't like tomatoes, won't eat them and are thus depriving yourself of much in life. If I were you I'd learn to eat them.

Mrs. Sankey—But you don't like rhubarb, John!

"Oh, well, but that's not fit to eat."—London Answers.

Necessary.

Don't get the notion in your head that you can be a shirk. The world won't give you meat and bread unless you give it work.

In Doubt.

"For a chap just engaged to such a lovely girl you seem a bit gloomy."

"Well, I'm worried. You know Jessica is an enthusiast always. Once it was for horses, once for dogs, once prize poultry, once Angora cats. Now—am I a regular sweetheart or is she just taking up another animal fad?"

Well-Trained Ones.

"My son is very fond of trained animal exhibitions."

"He is?"

"Yes, especially of pony ballets."

Catty Reply.

"Are those curls of Annie's natural?"

"I should say they were. You can't tell them from her own hair."



"That son of yours isn't very bright, but he has a big appetite."

"Yes, I expect he'll make a fine college athlete."

Looks Suspicious.

He says it's unaccountable. And still the fact is there. That while his wife was at the beach the parrot learned to swear.

Click Claque.

Oris—Movie people are rather clannish, aren't they?

Chester—If they are, they come honestly by it. Even the camera has its own click!—Film Fun.

The Last Resort.

"There's one thing left. If this business venture of mine fails I know what I shall have to try next."

"What's that?"

"I shall have to begin writing plays for the moving picture people."

One on the Editor.

Fresh—I know more about this joke game than the editor does.

Soph—That's possible.

Fresh—Sure; he thought the stuff I submitted was original.—Stanford Chaparral.

A Changed Man.

"Our candidate is getting fond of public speaking."

"I'll say so. A while back we could hardly coax him to stand up, and now it's practically impossible to induce him to sit down."—Judge.

Ethel Could Advise.

Ella—Jack's been calling on me for six months. Don't you think it's time he proposed?

Ethel—Oh, no; it was nearly a year before he proposed to me.—London Answers.

## DAIRY

STOCK THRIVE ON ROUGHAGE

Feeding Value of Silage, Fodder and Stover in Dairy Ration Not Fully Appreciated.

The feeding value of corn silage, corn fodder and corn stover in the dairy ration is not sufficiently appreciated, especially in those regions where legumes do not thrive, says a specialist of the dairy division, United States department of agriculture. A recent study of records from cow-testing associations points to the conclusion that the growing of more corn roughage and less non-leguminous hay would increase the profitability of the ration.

In all sections where legumes thrive it is, of course, advisable to grow them, as their value is well recognized for feeding dairy cattle. In fact, from a study of cow-testing association reports it would seem that even grain does not fully take the place of good legume roughage. It is in these sections where legumes do not thrive, however, that dairymen may well consider the growing of more corn roughage and less non-leguminous hay.

Few plants apparently contain all the substances required to nourish properly the animal body, but in the light of present knowledge, the corn plant seems to be one of these. It is possible to balance a ration from corn products only that will enable the animals to thrive and reproduce with apparently no ill effects. This is



Filling Silo With Corn—More Corn Silage or Other Corn Roughage Is Needed, Especially in Regions Where Legumes Do Not Thrive.

not the case with many other crops. Corn, then, has unusual feeding properties.

Experimental work done at the South Carolina and Pennsylvania stations has shown that it is practical under some conditions to feed dairy cows on a ration of corn silage and grain without hay. Such a ration has been used successfully in feeding beef steers. Reports from one cow-testing association in a non-leguminous hay region having an unusually high income over cost of feed and large production per cow is in a district where the dairymen have practically discontinued the feeding of hay, but instead feed silage and corn fodder. In this association the grain ration is also composed largely of corn by-products.

No matter what other conclusions may be drawn from the evidence available showing the value of corn fodder and corn silage as dairy feeds, it seems certain that the corn plant provides an excellent roughage.

Hay is often damaged very much by becoming overripe. Storms damage it seriously. The feeding value of corn is not damaged by its becoming mature, and if it is properly shocked storms do little damage to it.

There are undoubtedly many dairymen who can well consider the wisdom of reducing the amount of non-leguminous feed, corn fodder, and silage to feed their dairy cows.

## DAIRY NOTES

Feed the cows well.

The sooner the utensils that have contained milk or been in contact with it are washed the easier the job will be.

Grass, hay, fodder, and other roughage which may not have a ready sale are economically utilized by the dairy cow.

Contagious abortion can be prevented by the use of an antiseptic solution used on the sire after each service.

Through the dairy cow many unsalable roughages may be transformed into products from which cash may be realized.

A jar of vasoline is almost a necessity around the dairy barn, especially on very cold days when chapped and cracked teats are common.

To keep the herd sire from getting too fat give him access to a small field or paddock where he can get the necessary exercise.

Vermont experiments indicate that it takes about two and a half tons of pumpkins to equal in feeding value one ton of silage for milk cows.

Do not feed the calf a large amount of milk just because it is there to be fed. It is better to feed the calf a uniform amount daily and then give the surplus to the pigs.